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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/512,629	02/25/2000	Henrik Nyberg	040000-593	7131
27045	7590	03/24/2004	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR C11 PLANO, TX 75024			FAN, CHIEH M	
			ART UNIT	PAPER NUMBER
			2634	

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/512,629

**Applicant(s)**

NYBERG ET AL.

**Examiner**

Chieh M Fan

**Art Unit**

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-13 and 15-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-30 is/are allowed.
- 6) ☒ Claim(s) 9, 15 and 16 is/are rejected.
- 7) ☒ Claim(s) 10-13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Since the applicants cancelled all of the claims rejected in the last Office Action, the finality of that action is withdrawn.
2. The indicated allowability of claims 9, 15 and 16 is withdrawn in view of the newly discovered reference(s) to Bantz et al. (U.S. Patent No. 5,394,433). Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 9, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Bantz et al. (U.S. Patent No. 5,394,433, "Bantz" hereinafter).

Regarding claim 9, Bantz teaches a method for allocating a plurality of frequency hopping sequences comprising the steps of (col. 10, lines 3-14):

deriving network performance as a function of a current allocation of said plurality of hopping sequences amongst a number of cells, and as a function of a network

collision measure (160, 162, 164, 166, 168 in Fig. 6; also see steps (a)-(e) of claim 1 and claims 2-6; col. 18, line 51 through col. 19, line 39)

re-allocating one or more of said plurality of frequency hopping sequences until network performance is optimized (172 in Fig. 6, col. 3, lines 61-63; also see steps (f) and (g) in claim 1); and

maintaining the allocation of frequency hopping sequences, amongst the cells, that resulted in optimized network performance (174 in Fig. 6, col. 3, lines 55-59).

Regarding claim 15, Bantz also teaches reallocating one or more of said plurality of frequency hopping sequences for one cell at a time (Fig. 6 of Bantz is directed to revise the frequency hopping (FH) pattern for a base station at a time. It is not directed to revise multiple FH patterns used in multiple base stations simultaneously).

Regarding claim 16, the claimed limitation is inherent because the network performance would not be optimized if the frequency hopping sequences were assigned in accordance with a non-predetermined allocation method, i.e., in a random or uncontrolled manner. Further, Bantz teaches that the hopping sequences are distributed and maintained by a wireless network manager (WNM) and a wireless control agent (WCA) (col. 10, line 68 through col. 11, line 2). When the hopping sequences are distributed and maintained by a controller, the hopping sequences are allocated in a predetermined manner.

***Allowable Subject Matter***

5. Claims 17-30 are allowed.

Claims 10-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chieh M Fan whose telephone number is (703) 305-0198. The examiner can normally be reached on Monday-Friday 8:00AM-5:30PM, Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (703) 305-4714. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

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Chieh M Fan  
Primary Examiner  
Art Unit 2634

cmf  
March 14, 2004